Remarks

The above Amendments and these Remarks are in consideration of the Office action mailed

September 27, 2001

New Claims

The Examiner noted several inconsistencies between the previously pending claims as

submitted in the Amendment dated August 15, 2001, and the claims submitted in the Appendix

thereto. In order to avoid confusion as to the present state of the claims in the application, Applicant

has herein requested deletion of the currently pending claims and added of new claims 31 - 59.

Rejection of Claims 22-27 Under 35 U.S.C. §112

It is respectfully submitted that the claims, as now presented, obviate the rejection of claims

22 - 27 under 35 U.S.C. §112 in the Office Action mailed September 27, 2001, moot. It is

respectfully noted that the term "checksum" no longer appears in the newly-defined claims.

Rejection of Claims 1 – 15 and 17 Under 35 U.S.C. §112

It is respectfully submitted that the claims, as now presented, render the rejection of claims

1 – 15 and 17 under 35 U.S.C. §112 in the Office Action mailed September 27, 2001, moot.

The Examiner's comments with respect to the previous claims 1 - 15 and 17 were noted in

the preparation of new claims 31 - 59.

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Summary of Telephonic Conversation

On January 24, 2002, the undersigned attorney telephoned the Examiner to arrange a

telephonic interview. Applicant indicated Applicant's plan to file a Request for Continuing

Examination and the Examiner indicated that the Examiner would prefer to have the applicant file

the RCE and accompanying response prior to the interview.

The Examiner also indicated that the Examiner would telephone the undersigned

attorney upon review of the amendment and prior to issuing any Office Action on the merits.

Should the Examiner not be disposed to allow the case upon consideration of this Response,

the undersigned attorney requests the opportunity to conduct a telephonic interview as so offered.

Rejection of Previously Pending Claims
Under 35 U.S.C. §102(e) and 35 U.S.C. §103

obvious in view of Paul (U.S. Patent No. 5,999,932), alone or in combination with the art cited in the

It is respectfully submitted that the claims as now presented are neither anticipated by nor

Office Action mailed September 27, 2001. While the pending claims are newly submitted, they are

not identical to the previously pending claims. Certain similarities between the instant claims and

those previously pending merit discussion. Such discussion is not an admission that the instant

claims are in any way narrowed versions of the prior pending claims.

Scope and Content of the Prior Art

The primary reference cited by the examiner, Paul, discloses a substantially different system

for filtering SPAM email than the invention for identifying all types of digital files presently claimed

in this application.

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In the most basic embodiment, *Paul* teaches a filtering technology not used in the invention as presently defined. This filtering technology is based on a simple comparison between content in fields of an email and those stored in a database:

The filter 304 compares the data stored in the "TO," "FROM," "CC," "BCC," and "SUBJECT" fields of the incoming e-mail messages with corresponding categories of data stored in the inclusion list processor 302. If data in any of these fields of the incoming e-mail matches data stored in a corresponding field of the inclusion list processor 302, the incoming e-mail is marked "OK" and forwarded to the user. If no match is detected, the e-mail filter 304 performs at least one type of heuristic processing to determine whether the e-mail may be of interest to the user, and, if not, labels the e-mail message accordingly, for example, as "JUNK." (*Paul*, col. 7, lines 29-40)

Paul discloses a program which operates on email received by, and solely within the confines of, a single computer – either a client or a server. The database used – the "inclusion list processor" – resides on the computer itself, or a separate server; however, the filtering occurs on the device itself, as illustrated in the following text of Paul:

In the preferred server embodiment shown in FIG. 3, the e-mail filter 304 interacts with the e-mail message store 306 that processes the e-mail and performs other known functions for a multiplicity of e-mail addresses or accounts. In the preferred embodiment, the e-mail store 306 is an improved e-mail server message store that stores additional information about the category of each e-mail message. In an alternative preferred embodiment, the status of e-mail messages is handled in a separate database (not shown) outside the message store 306.

As depicted in FIG. 3, the inclusion list processor 302 may store an inclusion list for each e-mail address or, alternatively, an inclusion list for each group of e-mail addresses organized by domain or other group. According to another alternative preferred embodiment, each inclusion list created and maintained by the inclusion list processor 302 includes an additional data field to identify characteristics of at least one user account or e-mail address. This embodiment has the advantage of providing centralized management of account information for electronic messages. (*Paul*, col. 7, lines 41-62)

Most notably, the filtering occurs on the actual data stored in the data fields based on whether the email is allowed to pass, hence the term, "inclusion list". While there may be multiple databases, as Figure 3 indicates, the inclusion message store is stored on a single computer.

As a result:

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• Paul only performs processing on email it receives and the database therefore only has information about the information received by that particular machine.

• Paul must perform a processing intensive matching routine on each email.

• Paul does not interact with any other system in the filtering or heuristic processing, but only checks a server based inclusion "list" on the same computer as the processor.

• Paul does not convert the data to any other form – that is, Paul does not attempt to modify or "hash" the data before it performs its processing.

Differences Between the Claimed Invention and the Prior Art

It is respectfully submitted that *Paul* does not disclose, or render obvious to one of average skill in the art, the invention defined in the present application.

CLAIM 31

With respect to claim 31, it is respectfully noted that *Paul* fails to teach an number of claimed features. First, *Paul* fails to disclose:

a plurality of agents, each agent including a file content ID generators, at least one agent provided on one of a plurality of clients;

Paul teaches a plurality of agents filtering address fields, not generating file content IDs. As noted in the text quoted above,

The filter 304 compares the data stored in the "TO," "FROM," "CC," "BCC," and "SUBJECT" fields of the incoming e-mail messages with corresponding categories of data stored in the inclusion list processor 302. (*Paul*, col. 7, lines 29-33)

There is no "generation" as called for by claim 31.

Second, *Paul* does not teach the use of a "file content ID" as the term "file content ID" as used in claim 31. The Examiner apparently has taken the position that the term

"digital content ID" in the previous language of the claims was equivalent to the inclusion list

data, i.e., the portion of the message that is compared in Paul. However, the term "file

content ID" cannot be read in the abstract but in terms of how that term is used in the present

application and is a separate and distinct client from the "file". On such reading, it is clear

that a "file content ID" is not the same as the simple filtering of portions of the email. The

"file content ID" is clearly a separately claimed element from the file itself. To the extent

that the Examiner is asserting that any "agent" generates a file ID, such ID must be separate

and apart from the file itself. Hence, mere creation of an email message by a an email client

would create only the file, not the file ID, since the claim clearly calls for two separate

elements.

Third Paul fails to teach:

a file content ID appearance database, provided on a server, coupled to receive

file content IDs from the agents; (emphasis supplied)

As noted above, Paul teaches the use of an inclusion list and heuristic processing on the same

system. Paul merely receives email and generates a database on the same computer as the filtering

routine. It should be noted that the language of claim 31 above requires that the database be "coupled

to receive digital content IDs from the client agents". In Paul, there is no teaching that any "agent"

on one device communicates with a database on another device, or that the system therein is even

capable of communicating with agents or databases on other devices.

Hence, there is no disclosure or teaching of a database of "file content ID" which is provided

on a "server" as defined in claim 31.

Fourth, there is no disclosure of

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a characteristic comparison routine on the server, identifying a characteristic of the file content based on the appearance of the file content ID in the appearance

database . . . . (emphasis supplied)

As noted above, Paul teaches a system wherein the comparison takes place on a single device. In

claim 31, the comparison takes place on the server while the agent which generated the ID is on a

separate "client" device.

The apparent assertion by the examiner that the multiplicity of devices performing the

filtering functions, each with a database thereon, does not amount to as system as claimed since such

agents and the comparison routine do not communicate with each other.

Fifth, there is no teaching of "...a characteristic comparison routine ... and transmitting the

characteristic to the client agents." As noted above, the only information communicated to a system

in Paul is the email which is under consideration by the system. The software on each machine does

not communicate with software on other machines.

Hence, there are five distinct differences between the invention as defined in claim 31 and

that disclosed and taught in Paul. The existence of any one of such differences is sufficient to

remove the invention defined in claim 31 from anticipation under 35 U.S.C. Section 102.

Applicant specifically takes issue with the Examiner's characterization of the *Paul* reference

relative to claim 23 in the prior action. The Examiner appears to assert that Paul suggests that an

inclusion list is met on an email server. Claim 23 required that the "database on the second system

coupled to the ID generator to receive IDs generated by the ID generator". As understood, the

Examiner appears to contend that the replication of the same system (e.g., the system shown in

Figure 3 of Paul at reference numeral 301) on different machines met the limitations of the claims

calling for communication of IDs.

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In view of the foregoing, it is respectfully submitted claims 31-38 are not anticipated by, nor

obvious in view of, Paul.

CLAIM 39

With respect to claim 39, applicant respectfully asserts that the invention defined

therein is not disclosed, or rendered obvious, in view of Paul. The invention defined in claim

39 includes a method having steps which are not performed by the Paul system. In

particular, the method calls for:

receiving, on a processing system, file content identifiers for the data files from a plurality

of file content identifier generator agents, each agent provided on a source system, via a

network; (emphasis supplied)

As noted above with respect to claim 31, Paul teaches a system which operates solely on one

device. Hence, there is no separate "Processing system" which "receives" "file content

identifiers" which are provided by "generator agents" "provided on a source system".

Moreover, there is no step of:

determining, on the processing system, whether each received content identifier

matches a characteristic of other identifiers;

As noted above, any step of determining in Paul occurs on the same system that receives the

email, and such system cannot constitute a "processing system" within the context of the

claimed invention of claim 39 since is does not "receive" identifiers from "agents".

Finally, Paul fails to disclose, teach or provide any suggestion of a step calling for:

outputting, from said processing system to at least one of source systems

responsive to a request from said source system, an indication of the characteristic of the

data file based on said step of determining.

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In *Paul*, the "indication" if any, is provided on the same system as the processing and hence there is no "outputting from said processing system" as called for in claim 39.

Hence, it is respectfully submitted that claim 39 is not anticipated by, nor obvious in view of, *Paul*.

Therefore, it is respectfully submitted that the invention defined in claim 39 and the claims dependent therefrom is not anticipate by, nor obvious in view of, *Paul*.

## CLAIM 46

It is further respectfully submitted that the invention defined in claim 46 and the claims dependent therefrom is not obvious in view of *Paul*.

Like claim 39, claim 46 defines a method including:

receiving, on a second computer, a digital content identifier unique to the message content from at least two of a plurality of first computers having digital content ID generator agents;

Again, *Paul* does not disclose communication between any first computer having a "digital content ID generator agent" and any second computer which further performs the step of:

comparing, on the second computer, the digital content identifier to a characteristic database of digital content identifiers received from said plurality of first computers to determine whether the message has a characteristic;

Further, as set forth above, *Paul* does not teach any step of communication between the first and the second computer wherein any computer would perform the step of:

responding to a query from at least one of said plurality of computers to identify the existence or absence of said characteristic of the message based on said comparing.

Again, there is no equivalent disclosure of such a step in *Paul* since, in *Paul*, the characterization of the email message is performed on the same computer which receives the message.

Hence, it is respectfully submitted that the invention defined in claims 46 and the claims dependent there from is neither anticipated by, nor obvious in view of, *Paul*.

## CLAIMS 51 and 55

It is respectfully submitted that the invention defined in claims 51 and the claims dependent thereto, and claim 55 and the claims dependent thereto are not anticipated by, nor obvious in view of, *Paul*.

Each such claim includes features similar to those set forth above which distinguish it from *Paul* and other cited prior art.

Claim 51 calls for: (1) "a file ID generator"; (2) "a file ID generator on the first system"; (3) a generator "outputting at least one file ID value for the file based on a generated hash"; (4) "a database on a second system coupled to the ID generator to receive IDs generated by the ID generator"; and/or (5) "...a comparison routine on the second system".

Once again, the invention defined in claim 51 includes at least five different features from the system taught in *Paul*.

Likewise, claim 55 includes features similar to those set forth above with respect to claim 31 and which distinguish the invention set forth therein from that disclosed in *Paul*, namely: (1) "a client agent file content identifier generator"; (2) a generator "...on the first computer;" (3) a generator providing a "...file content identifier comprising a computed value of at least two non-contiguous sections of data in a file"; (4) "a server comparison agent ...on the second computer"; and (5) the server "... receiving identifiers from the client agent and providing replies to the client agent."

In particular with respect to the limitation of claim 55 calling for a "...file content identifier comprising a computed value of at least two non-contiguous sections of data in a file", in the Office Action, the Examiner addresses a similar limitation appearing in cancelled claim 27 by stating that "it would have been obvious to one of ordinary skill in the art to do so in order to benefit from a common algorithm for data validation."

It is respectfully submitted that neither *Paul* nor any other cited prior art teaches a feature consistent with this language in claim 55 and the Examiner's statement above finds neither any support in such prior art nor has any relevance to the claimed invention. It is respectfully not understood how an algorithm for data validation as a checksum is related to the claim language in claim 27 or the present invention, as *Paul* simply teaches examining portions of an email message, not computing a file content identifier.

Hence, it is respectfully submitted that the invention defined in independent claims 51 and 55 and the claims dependent therefrom, is neither anticipated by nor obvious in view of *Paul*.

## CLAIM 56

It is respectfully submitted that the invention defined in claim 56 is not obvious in view of the cited prior art. Claim 56 includes features similar to the method claims set forth above which distinguish the invention defined therein from the cited prior art, and in particular:

- (1) "collecting data on a processing system from a plurality of systems .. to a server having a database";
- (2) collection data from a plurality of systems "having a client agent generating digital content identifiers for each of a plurality of files..."
  - (3) "characterizing the files on the server"
  - (4) "characterizing the files ... based on said digital content identifiers"
- (5) "characterizing the files ... relative to other digital content identifiers collected in the database"
- (5) transmitting a content identifier from the processing system to the client agent.

As noted above, *Paul* teaches the use of an inclusion list and heuristic processing on the same system. *Paul* merely receives email and generates a database on the same computer as the agent. Hence, there is no set of process steps performed by *Paul* between a client and a server system, as defined in claim 56.

\* \* \*

The Examiner's prompt attention to this matter is greatly appreciated. Should further questions remain, the Examiner is invited to contact the undersigned attorney by telephone.

Enclosed is a PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. § 1.136 for extending the time to respond up to and including today, January 25, 2002.

The Commissioner is authorized to charge any underpayment Deposit Account No. 501826 for any matter in connection with this r extension of time, which may be required.

Respectfully submitted,

Date: <u>January 25, 2002</u>

Bv:

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